## Testimony of Theodore (Ted) Lorensen Assistant State Forester, Oregon Department of Forestry before the Senate Committee on Agriculture, Nutrition and Forestry

## **Hearing on 2007 Farm Bill**

August 15, 2006

### Introduction

Mr. Chairman and members of the Committee, thank you for inviting me to talk with you today about the 2007 Farm Bill.

The nation's forests provide a tremendous array of goods and services. They provide ecosystem services like clean water and carbon storage; they provide timber and jobs to rural economies around the country, where they support family wage jobs in manufacturing, forestry, transportation and services. Forests are very important to our economy and quality of life, yet the nation lacks a clear vision with policies that promote environmentally, economically, and socially sustainable management of the nation's public and private forests as a priority.

Family forestlands are an extremely important and vulnerable part of the land base that has been greatly assisted by farm bills in the past. More than 40% of our nation's forest lands are family-owned forests. These forests contribute to a wide array of tangible, marketable products, while meeting a range of soil, water, air, plant and wildlife goals. There are over 10 million family forest landowners who need federal financial and technical assistance. Technical assistance enables many landowners and operators to apply sustainable practices without necessarily requiring financial assistance, making these initiatives efficient and effective. Studies prove that forest landowners who receive technical assistance spend more of their own money to implement practices on the ground. According to a recent Forest Service report, "Forests on the Edge," more than 44 million acres of private forest nationwide -- about 11 percent -- are expected to see increased development within the next 25 years. The report says most of the boom will be in watersheds in California, the Pacific Northwest and the eastern United States, the report says.

In addition to recognizing the role that family and non industrial private forests play in the conservation of the nation's natural resources, we must think broader than these ownership boundaries. The nation is in need of a strong commitment to sustainable forest management across all ownerships, not just family-owned forests. Federal forests, state

forests, other public forests, and private forests all have important roles and are dependent upon each other in achieving overall sustainability. The interdependence of public and private forestlands is now being well demonstrated by the loss of lumber mills and other infrastructure necessary to support the essential management of our forests throughout the West. Private forestlands in parts of eastern Oregon can no longer be economically managed due to substantially increased hauling distances to the nearest remaining markets. Based upon recent analysis conducted by the Department and USDA Forest Service, if current policies remain in place, it is likely that 3 additional mills in eastern Oregon will soon close, making the problem worse. Without the opportunity to manage these lands, forest health cannot be sustained and uncharacteristic wildfire will continue to test our resources.

"Sustainable forest management" is an internationally accepted and applied concept. Key to the vision of sustainability is that, across large areas, forests must be able to deliver a full, integrated set of values and services. That is, the social, economic, and environmental values services of our forest must be considered together and in an integrated manner.

The need for integration is based upon a key realization that if forests cannot generate revenue than we either risk conversion to other uses or forests will become unhealthy as the landowners cannot afford to keep them or manage their forest's health. Thus, we lose the benefit of environmental values such as clean water and wildlife habitat, or social values such as recreation and scenic beauty. This is true on both public and private ownerships.

At the same time, if a forest's intrinsic environmental values are not protected we jeopardize the basic soil, water and biological capacity that underpin the derived economic and social values. Social values obtained from forests such as recreational opportunities and scenic beauty cannot be provided if the environmental and economic aspects of forests are not also maintained. And completing this integrated circle, if the environmental and economic concerns push beyond the social license to do forest management, we lose our ability to enhance and manage the forests' resources.

The vast majority of our laws and policies in the US do not reflect this concept—that the economic, social, and environmental aspects of forests are each important and essential to maintaining and conserving the nation's forests.

Currently, there is no national statement in support of sustainable forest management. We continue to work in a policy environment that does little to encourage sustainable management on the forest landscape and across all ownerships. Various realities reflect this lack of sustainable forest management laws and policies including:

- Rapid loss of forests to development
- Widespread sale of industrial forestlands
- Growing forest health problems—insects, diseases, invasive species, and wildfires
- Continued disinvestment in federal forestlands
- Changing market forces through globalization

• Economic instability of private family forests.

Sustainable forest management can help address these challenges and at the same time provide numerous new opportunities for the nation including improved energy security, reduction in greenhouse gases, cleaner water, healthy rural economies and domestic jobs, to name a few. We should concentrate our efforts on promoting policies and investments that keep our forestlands producing a wide array of outputs. With the right policy framework and investments, forests in the United States have great potential to increase their contribution to the social, economic and environmental health of our great nation.

This new vision of and wise investment in sustainable forestry is clearly needed to allow our forest sector to compete in the global economy and realize its economic, environmental and social potential at home, while avoiding transferring environmental costs to less enlightened nations.

The forest sector is extremely important to the nation's and Oregon's economy. The Oregon Forest Resources Institute (OFRI) commissioned E.D. Hovee & Company in 2004 to conduct an economic study, *Oregon Forest Sector Contributions and Potential* (copies of the Phase I and II Reports' Executive Summaries are attached). The study's goal was to identify steps that the forest sector could take to enhance its contributions to the state's economy, particularly in rural communities, while keeping its internationally regarded environmental commitments.

Phase I of the study found that Oregon's forest sector provides 85,600 direct jobs and a total of 190,400 direct and indirect jobs when multiplier effects are included. These direct and indirect jobs account for some 9% of jobs in Oregon and 10% of the state's labor income. The total economic output supported directly and indirectly by Oregon's forest sector is about \$22 billion, or about 11% of the total value of goods and services produced in Oregon.

The study also found that the projected harvest levels of less than 4 billion board feet annually over the next 10 years were less than half of the harvest levels in the 1980s. This projection was due primarily to a continuation of the current management strategies on federal forestlands that have reduced their harvest by more than 90 percent. While harvest levels on private lands have remained relatively stable, they now account for 85% of the total harvest, which underscores the importance of private lands. The study concluded that, **without major changes in federal timber harvests**, annual statewide harvest levels could be increased by 25% to 5 billion board feet, potentially providing more than 20,000 additional forest sector jobs. Still well below the biologically sustainable level of 10 billion board feet.

Phase II of the study (*Oregon's Forest Cluster*) concluded that to compete more effectively in the 21st century global market, Oregon's forest sector needs to embrace an updated, expanded "forest cluster vision." The Forest Cluster Analysis recommends a new vision that encompasses: 1) strengthening a core forest sector with enhanced networking capability, 2) positioning Oregon as a global leader committed to both market

and non-market objectives, 3) pursuing commodity and value-added niches and 4) benefiting rural and urban communities. The forest cluster is likely to be enhanced by providing the regulatory incentives necessary to sustain long-term investment in healthy Oregon forests while offering the flexibility for businesses, non-profits and public agencies to be nimble in creating and sustaining market leadership yielding economic contributions to the state for generations to come.

Congress needs to clearly establish a vision and policies that promote sustainable management of the nation's public and private forests as a high priority. The vision and policies need to promote the great potential of the nation's and Oregon's forests. A strong statement about the nation's commitment to sustainable forest management is needed in the 2007 Farm Bill. Such a statement will:

- 1) Express the importance of sustainable forest management across all ownerships; federal, state, other public, industrial and family forests;
- 2) Encourage and promote dialogue around establishing a national policy;
- 3) Encourage new and innovative policy ideas and create new non-regulatory programs that support sustainable forest management across the landscape and ownership boundaries;
- 4) Clarify and enhance the roles of federal, state, and local governments, respectful of the delegation of powers, to promote regional collaboration and joint planning and program delivery;
- 5) Respect the critical role of private forest ownership in our country while striving to conserve, in a fair and equitable manner, the public benefits that they provide;
- 6) Recognize that federal lands must better contribute to the goal of sustainable forests in a coordinated manner across landscapes, and that in some parts of the country these lands have a **pervasive influence on the sustainability of all forestlands**.
- 7) Promote new and creative delivery systems for outreach, education, research and technical assistance to deal with the changing environments of forest ownership, management and investment; and
- 8) Encourage the revision of forest tax policy in relevant legislation to create fiscal mechanisms for new emerging environmental markets, establish a clear national priority for sustainable forests across all ownerships, and level the playing field so sustainably managed forests can compete with real estate market values; and
- 9) Recognize the global influences that impact US forests and the impacts that America's consumption of wood has on the world's forests.

The National Association of State Foresters and the Society of American Foresters are currently working on these ideas and they invite you to join them as further development is made in conjunction with various partners and interests. We look forward to working with you to promote sustainable forest management across our nation.

In the short-term, forestry needs to be a part of the Farm Bill with its own title as well as integrated into other titles like conservation, energy and rural development--since forestry can help meet the goals of these titles too. We offer the following suggestions:

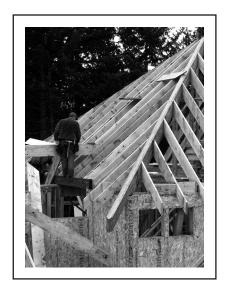
- ➤ Place a higher priority on forestland than currently exists and encourage greater participation by forest landowners.
- Leverage income from both public and private sources to reward private landowners for managing their lands to provide public benefits to communities and the environment.
- ➤ Be well integrated and coordinated among federal and state partners, in order to improve efficiency and facilitate landowner participation in programs.
- ➢ Be directed at key state priorities, encourage multiple landowner cooperation across landscapes and watersheds, and address issues on a scale that will make a difference on the ground. Support for renewable fuels development − bioenergy − should be an important consideration for the future Farm Bill. Attention to forestry in the Farm Bill should recognize the pressures that family forest landowners are facing. Changes in statute should provide more reasons for family forest landowners to retain ownership, rather than sell and further fragment our forests.
- ➤ Recognize the central role that outreach, education and technical assistance can play in guiding forest landowners toward sustainable stewardship of their forests, and the role that forestry research can play in moving these objectives forward.

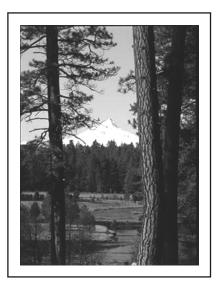
State Forestry Agencies are willing to bring more information and input to the discussion on Farm Bill issues over the next six months, as well as to help implement the Farm Bill's forestry initiatives.

## Study Highlights

## **Oregon Forest Sector Contributions & Potential**

May 2004





A new economic study confirms the importance of the Oregon forest sector to the state's economy today and in the future. The sector is critical for the prosperity of rural Oregon. The study outlines options that allow increasing jobs and revenues from the forest sector consistent with Oregon's vision for environmentally, socially and economically sustainable forest management.

Of paramount importance is maintaining the stability of timber supply so Oregon can maintain the competitive advantage it has traditionally enjoyed in talent and infrastructure. Without stability, including more intensive management of federal lands, the industry faces disincentives and higher risk of disease, insect infestation and intense, uncharacteristic fire. This problem is already evident in eastern Oregon. If increasing amounts of land are reserved from harvest, Oregon runs the risk of losing forest management expertise and resources that distinguish Oregon around the world and make the state a leader in forest resource protection.

*Oregon Forest Sector Contributions & Potential*, the study conducted for the Oregon Forest Resources Institute by E.D. Hovee & Company and FP Marketing Solutions, describes contributions of the forest sector to Oregon's economy and evaluates best opportunities for forest products to compete in a global market. Special attention was given to opportunities associated with secondary wood products, small and large logs and *Brand Oregon*.

## **Study Highlights Include:**

- Oregon's forest sector is important to the economy today and in the future.
  - o It is especially critical for the prosperity of rural Oregon.
  - Oregon can increase forest sector revenue and employment without diminishing its commitment to sustainability.
- Stability of timber supply is important in maintaining the competitive advantage Oregon has traditionally enjoyed in talent and infrastructure.
  - o Maintaining stability, including more intensive management of federal lands, is essential to avoid industry disinvestments and reduce the risk of disease, insect infestation and uncharacteristic fire. The need for stability is particularly evident in eastern Oregon.
- Tilting too far toward reserve strategies costs us more than harvest revenues – it risks the loss of forest management expertise and resources that distinguish Oregon around the world and make us leaders in forest resource protection.
- Forest land-use protection is put at risk by increasing regulation and limiting infrastructure to the point that private forestland cannot be profitably maintained in timber production.
- Oregon's forest sector has restructured in the wake of timber supply restrictions on federal lands plus rapid changes in both technology and global competition.
- Total harvest levels today from public and private forests are less than 4 billion board feet annually—less than 50% what they were in the mid-1980s. While harvest levels on private lands have remained relatively stable during this period, they now account for 85% of the total harvest.
- The core forest sector groupings of Primary Products, Secondary Products and Forestry Services:
  - O Employ 85,600 people as of 2000 (4% of Oregon's total employment). Total direct and

- indirect jobs produced by the sector exceed 190,000—9% of total state employment because the industry has a relatively high job multiplier of 2.22 for every person employed directly in the forest sector, another 1.22 jobs are supported elsewhere.
- o Account for a total industrial output of \$12.6 billion and wage income of \$3.5 billion (over 6 % of the total output value of the state and 5% of Oregon's wage income). The Primary Products sector pays an average wage \$49,800—45% higher than the state's average wage of \$34,400.
- Competitive strengths noted by stakeholders include highly productive forests, a strong forestry infrastructure (westside), proximity to markets, and a tradition of environmental leadership, including land use laws protecting forest use.
- Disadvantages cited include effects of reduced harvest, high cost of production and an unpredictable political climate. These factors have led to deterioration of forestry infrastructure east of the Cascades.
- Global production of wood fiber is expected to outpace demand, placing more intense cost pressures on Oregon's forest sector. Two divergent approaches are anticipated from industry participants—improved efficiencies for cost reduction and specialty products supporting premium pricing.
- Certification standards appear important to achieve market access (especially for retailers), but do not yet support a clear market premium.
  - O Uncertainty is expressed as to whether Oregon wood can establish a distinctive presence in a commodity market.
  - Cautious optimism is noted for a *Brand Or*egon concept emphasizing both sustainable forest management and the quality of Oregon wood.
- Oregon's forestlands are being managed under three primary strategic approaches: Reserve (managed for older forest habitat and objectives other

than harvest), Multi-Resource (managed for a variety of environmental and social objectives with limited harvest) and Wood Production (managed primarily for wood production).

- o This results in an overall management strategy that can be economically, environmentally and socially sustainable across the landscape.
- While baseline harvests dropped from 8.7 billion board feet in 1986 to 3.4 billion in 2001:
  - o Annual harvest projections range from a baseline scenario of about 4 billion board feet annually (most likely over the next 10 years) to a possible long-term sustainable harvest of up to 5 billion board feet, primarily from private forestlands. (This is well below the "biological potential" of 10 billion board feet.)
  - o At 5 billion board feet per year, the potential added direct job impact is estimated at 38,100.
- Other scenarios also were evaluated:
  - o Variables that affect the future harvests actually realized include the degree to which federal harvests approach levels of the Northwest Forest Plan and subsequent Healthy Forests Initiative
  - o Management of state forests for multi-resource use, and management intensity of both industrial and family forestlands for wood production use.
  - o Direct forest sector employment could increase from 21,000 to 52,000 jobs (above base year levels), depending on the forest management scenario considered.
- This review suggests that non-market values associated with Oregon's forests likely are less affected by the level of harvest than by how the forest landscape is managed. More intensive management of public and private lands can address both market and non-market values.

## **Opportunities:**

Looking to the future, opportunities to increase the market and non-market contributions from Oregon's forest sector appear integrally linked to:

- Acceptance of intensive forest management on some parts of the landscape— complemented by reserve and multi-resource objectives on other parts of the landscape—to better achieve economic, environmental and social benefits.
- Active management to achieve objectives, whatever and wherever they are—both market and nonmarket objectives, reserve and output objectives on all three categories of the forest landscape.
- More certainty about the management and outcomes for Oregon's reserve, multi-resource and wood production forests—yielding stable harvest levels across small- to large-log and multi-species resources together with enhanced non-market values.
- Primary producers utilizing state-of-the-art technology for top-end products—accessing a broader customer base and creating a market premium.
- Secondary value-added producers encouraged to come, stay and expand in Oregon—backed by availability of needed in-state raw materials and supportive infrastructure.
- Forestry tourism generating more and better employment opportunities—and reinforcing non-market ecosystem services, proximate land and passive (non-use) values.
- A full complement of supporting infrastructure including trained labor force, contractors, transportation, material and equipment suppliers—together with responsive public education, transportation, land use/regulatory, community and public services.
- Use of *Brand Oregon* to describe and sell Oregon forestry outputs statewide and globally.

## **Implementation:**

Some areas recommended for action or further research include the following:

- Convene stakeholders to collaboratively develop a common vision for Oregon's forest sector and its role in Oregon's economy.
- Recognize the eastern Oregon forest sector as an area of special emphasis for the state—addressing issues of declining employment, infrastructure, fire and habitat management on a priority basis.
- Conduct detailed market research and complete design for a forestry-based *Brand Oregon* initiative.
- Establish a working group to assist landowners and others seeking to be certified in a "market-based" forest certification scheme
- Work with federal land management agencies to establish protocols for more intensive fuel reduction to reduce risk of uncharacteristically intense wildfire and for other harvest activities—better implementing the adopted Northwest Forest Plan and Healthy Forests Initiative.
- Support research and outreach activities by the OSU Watershed Research Cooperative at the Hinkle Creek Paired Watersheds that evaluate the effects of modern forest practices on the physical and biological watershed characteristics, and evaluate the effectiveness and efficiency of modern forest practices in supporting the objectives of the Oregon Forest Practices Act and the Oregon Plan.
- Continue to work for recognition of the Oregon Plan for Salmon and Watersheds as the appropriate mechanism to protect and restore watersheds and listed anadromous fish populations.
- Develop and regularly monitor market and nonmarket benchmarks against which management and performance of Oregon's forest sector can be assessed.

- Support efforts to integrate a statewide conservation strategy with economic development priorities.
- Encourage changes in federal regulatory decisionmaking processes for consideration of short- and long-term risks to ecosystem health.
- Examine growth vs. likely harvest rates of Oregon's forests in different regions of the state (northwest, southwest, and eastern) that are managed under different management approaches (reserve, multiresource, and wood production). Assess implications of growth in excess of harvest for increased timber harvest and for increased risk of uncharacteristically intense wildfires.
- Secure funding for research and implementation of prototype biomass and small timber projects.
- Conduct more refined and product-specific analysis of potential productivity questions for Oregon primary processors.
- Consider more detailed research to refine economic impact estimates and identify key opportunities for Oregon forestry tourism.

## **Bottom Line:**

- Opportunities for improved economic contributions center on the need for a stable timber supply consistent with economic, environmental, and social objectives; development of new products and processes utilizing small diameter timber; and enhanced public awareness of the ability of Oregon forests to achieve economic, environmental, and social benefits.
- Barriers to be addressed include the need for a consensus vision and leadership to move from vision to action

# Assessment Highlights Oregon's Forest Cluster

## First of three economic assessments in Phase II of the study: Oregon Forest Sector Contributions & Potential

## Prepared for the Oregon Forest Resources Institute October 2005

The Oregon Forest Resources Institute (OFRI) commissioned E.D. Hovee & Company in 2004 to conduct an economic study, *Oregon Forest Sector Contributions and Potential*. The study's goal was to identify steps that the sector could take to enhance its contributions to the state's economy, particularly in rural communities, while keeping its internationally regarded environmental commitments.

Based on 2000 data, Phase I of the study found that Oregon's forest sector provides 85,600 direct jobs, or a total of 190,400 direct and indirect jobs when multiplier effects are included. These direct and indirect jobs account for some 9% of jobs in Oregon and 10% of the state's labor income. The total economic output supported directly and indirectly by Oregon's forest sector is about \$22 billion, or about 11% of the total value of goods and services produced in Oregon.

The study also found that projected harvest levels of less than 4 billion board feet annually over the next 10 years were less than half of the harvest levels in the 1980s, due primarily to a change in management strategies on federal forestlands. While harvest levels on private lands have remained relatively stable, they now account for 85% of the total harvest. The study concluded that annual statewide harvest levels could be increased by 25% to 5 billion board feet (still well below the biologically sustainable level of 10 billion board feet), potentially providing more than 20,000 additional forest sector jobs. Experience this past year reinforces this long-term potential, as timber harvest in 2004 was up by nearly a half-billion board feet to about 4.45 billion.

Phase II of the study provides economic assessments focusing on *Oregon's Forest Cluster*, Forest Tourism and Forest Growth & Mortality. Following are highlights of the Oregon's Forest Cluster assessment. Highlights of the Forest Tourism and Forest Growth & Mortality assessments plus the full Phase I and Phase II study reports are available from OFRI.

## **Oregon's Forest Cluster**

A cluster approach is being promoted by the Oregon Economic and Community Development Department, the Oregon Business Council and others as a way a business sector can enhance its contribution to statewide economic development.

Oregon's forest sector typically is defined as comprising primary and secondary wood products plus forestry services. A cluster approach involves an expanded view of geographically concentrated and interconnected economic activities and linkages to customers and suppliers, focusing on current and prospective competitive advantages offered by a region and its networked economic activities.

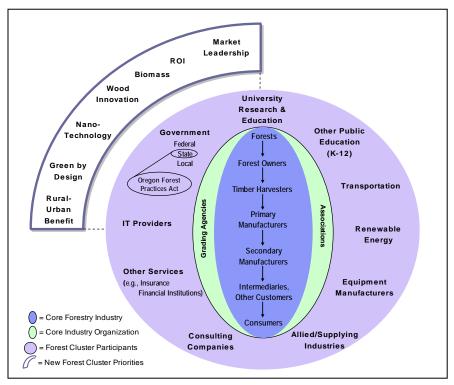
The forest cluster analysis represents the next step toward broadening the view of Oregon's forest sector to encompass an expanded cluster linked to existing and potentially supportive sectors throughout the state's economy.

Historically, Oregon's forest sector has been concentrated in or near the forest, with supportive industries (e.g., equipment suppliers, product distributors, etc.) more likely to be located in urban areas. While the historical linkages are still important, an updated cluster analysis is important to assessing opportunities for: 1) re-establishing linkages for improved individual company performance, innovation and statewide economic impact, and 2) identifying new partnerships with other new and emerging business clusters that have become critical to Oregon's continued prosperity.

Today the forest sector has restructured in response to changing timber supply and global competition and is now concentrated closer to major transportation corridors. It produces innovative products with an educated, technologically sophisticated workforce using research and high-tech equipment and processes. While the restructured forest sector is no longer the largest contributor to the state's economy, it is lean, resilient and competitive and remains critical to the prosperity of rural communities.

## A New Vision for Oregon's Forest Cluster

To compete more effectively in the 21<sup>st</sup> century global market, Oregon's forest sector needs to embrace an updated, expanded forest cluster vision. The Forest Cluster Analysis recommends a new vision that encompasses: 1) strengthening a core forest sector with enhanced networking capability, 2) positioning Oregon as a global leader committed to both market and non-market objectives, 3) pursuing commodity and value-added niches and 4) benefiting rural and urban communities.



Source: Eric Hansen, FP Marketing Solutions, as modified by E.D. Hovee & Company, LLC

A key question for the future involves a strategic choice between a competitive approach prominent in other U.S. business sectors (taking advantage of quick-moving opportunities in a world of hyper-competition, customization and rapid technological innovation) and one common in China and other countries (investing in relationships that provide a long-term strategic advantage). Oregon's forest cluster historically has operated more by the latter model. The

question now is whether to stay the course or adopt a more *cutting edge*, rapid-fire business paradigm for global competitiveness. The strategic direction chosen could combine elements of both approaches by: a) providing the regulatory incentives necessary to sustain long-term investment in healthy Oregon forests while b) offering the flexibility for businesses, non-profits and public agencies to be nimble in creating and sustaining market leadership yielding economic contributions to the state for generations to come.

## **Summary of Forest Cluster Recommendations**

### A. MARKET LEADERSHIP

- *Sustainable, predictable* harvest, increased from 4 to 5 billion board feet per year
- Transition from commodity to more valueadded mass customization
- Cooperative legislative agenda with other key Oregon business clusters
- Commitment to a statewide green agenda
- Moving the forest cluster front & center on the state's economic development agenda
- R&D brokered through OSU & cooperating institutions
- Wood marketing as the renewable, environmental & energy friendly alternative

## **B. ROI VIA STRATEGIC MANAGEMENT**

- Timely, reliable forest growth & mortality data
- Ecosystem services tailored to diverse forest & landowner interests
- Potential state acquisition of over-cut lands for long-term schools funding as working forests
- Tradable monetary credits for *carbon* sequestration
- Mechanisms for voluntary purchase or donation of conservation rights
- Maintenance of *large log* milling & marketing capacity

#### C. BIOMASS CONVERSION

- Statewide commitment to biomass for renewable energy
- Biomass inventories & 10-15 year supply assurances – with eastern Oregon priority
- *Bio-energy* cost write-downs & encouragement of utility participation
- *Bio-fuels* encouragement with minimum instate ethanol standards & potential public corporation vehicle for facility financing
- Bio-products research & development via the Wood Innovation Center coupled with nanotechnology linkage

## D. WOOD INNOVATION

- Globalized information dissemination & networking
- Real-time *buyer-seller* networks

- Customized, rapid-fire business & product research
- Forest cluster business & finance education
- Product design, testing & packaging services
- *R&D linkages* to biomass & nanotechnology commercialization
- Cooperative forest cluster marketing

#### E. NANOTECHNOLOGY

- Partnership exploration with ONAMI educational institutions & industry
- Forest nanotechnology *research leadership* with OSU & cooperating institutions
- Reach-out to *venture capital* partners
- Funding identification for *joint forest* cluster/high-tech nanotech research initiative

## F. GREEN BY DESIGN

- Continued application of internationally recognized *criteria & indicators* for forest sustainability
- Peer-to-peer dialogue & education between Oregon's forest products and architectural/engineering communities
- Business-led approach backed by *consensus-based* public policy
- Cooperative initiatives for large log & nontoxic engineered products, life-cycle standards for materials selection, use of sustainable wood in urban construction
- Consideration of statewide forest certification

#### G. CLUSTERING FOR RURAL & URBAN BENEFIT

- Active management appropriate to wood production, multi-resource & reserve forests
- Timber harvest consistent with Northwest Forest Plan
- Scheduling to facilitate *multi-season* inforest employment
- Incentives for *micro-business* including specialty species utilization
- Encouragement of forest-related *recreation* tourism
- Investment in rural transportation, infrastructure, rural industrial sites, affordable housing & Enterprise Zone opportunities